

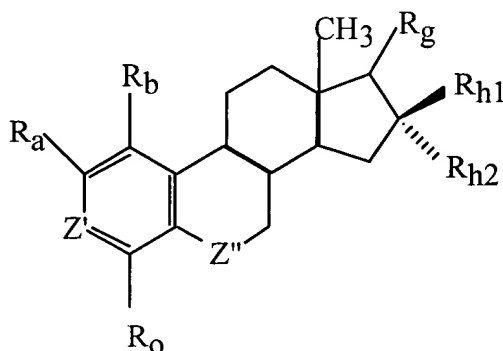
Applicants further request amendment of the application as indicated below and consideration of the following remarks. A petition for a one-month extension of time and a check to cover the petition fee for a large entity are enclosed herewith.

### In the Claims

Please cancel Claims 5, 16-33, 39-40 and 90.

Please re-write Claim 1 as follows:

1. (Amended) A compound of the general formula:



wherein:

a)  $R_b$  and  $R_o$  are independently -H, unless otherwise noted to be -Cl, -Br, -I, -F, -CN, lower alkyl, -OH, -OR<sub>6</sub>, -CH<sub>2</sub>-OH, -NH<sub>2</sub>, or N(R<sub>6</sub>)(R<sub>7</sub>), wherein R<sub>6</sub> and R<sub>7</sub> are independently hydrogen or an alkyl or branched alkyl with up to 10 carbons;

b)  $R_a$  is -N<sub>3</sub>, -C≡N, -CH<sub>2</sub>-C≡R, -C≡C-R, -C=CH-R, -R-C=CH<sub>2</sub>, -C≡CH, -CH<sub>2</sub>-C≡N, -C(O)-OR<sub>3</sub>, -O-R, -R-R<sub>1</sub>, -O-R-R<sub>1</sub>, OR(O)R, OR(O)R<sub>1</sub>, -R(O)R, -R(O)R<sub>1</sub>, -NHC(O)R<sub>6</sub>, -NRC(O)R<sub>6</sub>, -NH<sub>2</sub>, or N(R<sub>6</sub>)(R<sub>7</sub>), wherein R<sub>6</sub> and R<sub>7</sub> are independently hydrogen or an alkyl or branched alkyl with up to 10 carbons, or a hetero group wherein the hetero group may have more than one hetero atom and may be substituted, where R is H or a straight or branched alkyl with up to 10 carbons or aralkyl, and in any position F may be substituted in or on the carbon chain, and R<sub>1</sub> is -OH, -NH<sub>2</sub>, -Cl, -Br, -I, -F or CF<sub>3</sub> when R<sub>1</sub> is terminal;

c)  $Z'$  is >COH, unless otherwise noted to be >C-OAc;

d) >C-R<sub>g</sub> is >CH<sub>2</sub>, >C=O, >C=N-OH, >C(R<sub>3</sub>)OH, >C=N-OR<sub>3</sub>, >C(H)-NH<sub>2</sub>, >C(H)-NHR<sub>3</sub>, >C(H)-NR<sub>3</sub>R<sub>4</sub>, or >C(H)-C(O)-R<sub>3</sub>, where each R<sub>3</sub> and R<sub>4</sub> is independently an alkyl or branched alkyl with up to 10 carbons or aralkyl; or

B1  
Conty

$R_g$  is i) an alkyl of 1-10 carbon atoms that is straight chain or branched, ii) an alkenyl of 1-10 carbon atoms that is straight chain or branched having one or more double bonds at any position from C to  $Z_o$ , iii) an alkenyl group of 1-10 carbon atoms that is straight chain or branched having one or more triple bonds at any position where chemically possible, iv) a mono or dialkyl amino group wherein each alkyl chain has from 1-10 carbon atoms and is straight chain or branched, v)  $(CH_2)_n-CF_2-$ ,  $(CH_2)_n-CR_1$  or  $(CH_2)_n-CF_3$  wherein  $n=0-10$  carbons, or vi) H, and wherein any of i-iv are optionally substituted with an aromatic or heteroaromatic group or optionally substituted with a heterogroup and wherein  $R_g$  is either in the  $\alpha$  or  $\beta$  position, wherein  $R_g$  is not -OH; or

$R_g$  is  $R_{g1}$  and  $R_{g2}$ , and wherein  $R_{g1}$  may be present or absent and when present is -H, an alkyl, alkenyl, or alkynyl of 1-10 carbon atoms that is straight chain or branched and is optionally substituted, and  $R_{g2}$  is a hetero group, wherein when  $R_{g1}$  is absent the heterogroup is bonded to the 17-position with a double bond, and wherein either  $R_{g1}$  or  $R_{g2}$  can be in the  $\beta$  position with the other group in the  $\alpha$  position, and  $R_1$  is -OH, -NH<sub>2</sub>, -Cl, -Br, -I, -F or CF<sub>3</sub> when  $R_1$  is terminal, and wherein  $R_{g1}$  or  $R_{g2}$  are not together -H and -OH;

e)  $R_{h1}$  and  $R_{h2}$  are independently H, unless otherwise noted to be a straight or branched chain alkyl, alkenyl or alkynyl with up to 10 carbons that is unsubstituted, or substituted with one or more groups selected from a hetero functionality that is either not substituted, mono-substituted or multiply substituted with an alkyl, alkenyl or alkynyl chain up to 10 carbons; a halo functionality (F, Cl, Br or I); an aromatic group optionally substituted with at least one hetero, halo or alkyl; or  $R_{h1}$  and  $R_{h2}$  are independently a group containing at least one aliphatic or aromatic group optionally substituted with at least one hetero, halo or alkyl;

f)  $Z''$  is  $>CH_2$ ;

and wherein all monosubstituted substituents have either an  $\alpha$  or  $\beta$  configuration;

and wherein lower alkyl is defined as a carbon chain having 1-10 carbon atoms which may be branched or unbranched.

---

Please re-write Claims 4, 41-56, 81-88 and 91-92 as follows:

4. (Amended) The compound of Claim 1, wherein :

$R_a$  is -OCH<sub>3</sub>; and

B2

B2  
B3  
R<sub>g</sub> is =NOH.

41. (Amended) The compound of Claim 1, wherein :

R<sub>a</sub> is -OCH<sub>2</sub>CH<sub>3</sub>; and

R<sub>g</sub> is =CHCH<sub>3</sub>.

42. (Amended) The compound of Claim 1, wherein :

R<sub>a</sub> is -C≡C-CH<sub>3</sub>; and

R<sub>g</sub> is =CHCH<sub>3</sub>.

43. (Amended) The compound of Claim 1, wherein :

R<sub>a</sub> is -C(O)H; and

R<sub>g</sub> is =CHCH<sub>3</sub>.

44. (Amended) The compound of Claim 1, wherein :

R<sub>a</sub> is -NHC(O)H; and

R<sub>g</sub> is =CHCH<sub>3</sub>.

45. (Amended) The compound of Claim 1, wherein :

R<sub>a</sub> is -CH<sub>2</sub>OH; and

R<sub>g</sub> is =CHCH<sub>3</sub>.

46. (Amended) The compound of Claim 1, wherein :

R<sub>a</sub> is -CH<sub>2</sub>CH<sub>3</sub>; and

R<sub>g</sub> is =CHCH<sub>3</sub>.

47. (Amended) The compound of Claim 1, wherein :

R<sub>a</sub> is -CH<sub>3</sub>; and

R<sub>g</sub> is =CHCH<sub>3</sub>.

48. (Amended) The compound of Claim 1, wherein :

R<sub>a</sub> is -CH=CHCH<sub>3</sub>; and

R<sub>g</sub> is =CHCH<sub>3</sub>.

49. (Amended) The compound of Claim 1, wherein :

R<sub>a</sub> is -OCH<sub>2</sub>CH<sub>3</sub>; and

$R_g$  is  $=CH_2$ .

50. (Amended) The compound of Claim 1, wherein :

$R_a$  is  $-C\equiv CCH_3$ ; and

$R_g$  is  $=CH_2$ .

51. (Amended) The compound of Claim 1, wherein :

$R_a$  is  $-C(O)H$ ; and

$R_g$  is  $=CH_2$ .

52. (Amended) The compound of Claim 1, wherein :

$R_a$  is  $-NHC(O)H$ ; and

$R_g$  is  $=CH_2$ .

53. (Amended) The compound of Claim 1, wherein :

$R_a$  is  $-CH_2OH$ ; and

$R_g$  is  $=CH_2$ .

54. (Amended) The compound of Claim 1, wherein :

$R_a$  is  $-CH_2CH_3$ ; and

$R_g$  is  $=CH_2$ .

55. (Amended) The compound of Claim 1, wherein :

$R_a$  is  $-CH_3$ ; and

$R_g$  is  $=CH_2$ .

56. (Amended) The compound of Claim 1, wherein :

$R_a$  is  $-CH=CHCH_3$ ; and

$R_g$  is  $=CH_2$ .

81. (Amended) The compound of Claim 1, wherein :

$R_a$  is  $-OCH_2CH_3$ ; and

$R_g$  is  $=CHCH_2CH_3$ .

82. (Amended) The compound of Claim 1, wherein :

$R_a$  is  $-C\equiv CCH_3$ ; and

$R_g$  is  $=CHCH_2CH_3$ .

83. (Amended) The compound of Claim 1, wherein :

$R_a$  is  $-C(O)H$ ; and

$R_g$  is  $=CHCH_2CH_3$ .

84. (Amended) The compound of Claim 1, wherein :

$R_a$  is  $-NHC(O)H$ ; and

$R_g$  is  $=CHCH_2CH_3$ .

85. (Amended) The compound of Claim 1, wherein :

$R_a$  is  $-CH_2OH$ ; and

$R_g$  is  $=CHCH_2CH_3$ .

86. (Amended) The compound of Claim 1, wherein :

$R_a$  is  $-CH_2CH_3$ ; and

$R_g$  is  $=CHCH_2CH_3$ .

87. (Amended) The compound of Claim 1, wherein :

$R_a$  is  $-CH_3$ ; and

$R_g$  is  $=CHCH_2CH_3$ .

88. (Amended) The compound of Claim 1, wherein :

$R_a$  is  $-CH=CHCH_3$ ; and

$R_g$  is  $=CHCH_2CH_3$ .

91. (Amended) The compound of Claim 1, wherein :

$R_a$  is  $-N_3$ ; and

$R_{g1}$  and  $R_{g2}$  are each H.

92. (Twice Amended) The compound of Claim 1, wherein :

$R_a$  is  $-H$ ; and

$R_{g1}$  and  $R_{g2}$  are each H.